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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,443	10/17/2003	Darwin Rambo	15097US01	1556

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EXAMINER	
HARPER, V PAUL	

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2626	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/688,443	RAMBO, DARWIN	
	Examiner	Art Unit	
	V. Paul Harper	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46 and 48-88* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *37-46,48-51 and 66-88* is/are allowed.

6)☒ Claim(s) *1-4,9,14,26,52-56* is/are rejected.

7)☒ Claim(s) *5-8,10-13,15-25,27-36 and 57-65* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Nystrom et al. (US Patent 6,195,337), hereinafter referred to as Nystrom.

Regarding **claim 1**, Nystrom discloses a mode determining method. Nystrom's method includes the following:

- generating at least one parameter using at least one word of a voice data stream (Abstract, determines selected mode, cellular radio communications [voice data stream]; Fig. 5, "received code word" estimates generated [at least one parameter];); and
- identifying, based on said at least one parameter, a type of encoding used in generating said voice data stream (Fig. 5, estimates go to "Mode Decision" block, item 16 to determine the type of encoding).

Regarding **claim 26**, Nystrom teaches everything claimed, as applied above (see claim 1). In addition, Nystrom teaches "performing one or more tests, each comprising

one or more conditions using said at least one parameter" (Fig. 5, the code words produced by the estimated user data is used by the mode decision block, item 16, where the mode decision block with perform multiple tests).

2. Claims 1, are rejected under 35 U.S.C. 102(b) as being anticipated by Alley ("Automatic Identification of voice band telephony coding schemes using neural networks" Electronics Letters, 24th June 1993, Vol. 29, No. 13), hereinafter referred to as Alley

Regarding **claim 1, 4, 9, 14, 26, 52, 53, and 54** Alley teaches the automatic identification of coding schemes. In addition, Allen teaches:

- generating at least one parameter using at least one word of a voice data stream (Abstract, Fig. 1, excitation source, voice, see title of article; the data from the excitation source is processed [generating parameters] and sent to the classifier); and
- identifying, based on said at least one parameter, a type of encoding used in generating said voice data stream (Fig. 1, the classifier determines the encoding type).

Regarding **claim 4**, Alley teaches everything claimed, as applied above (see claim 1). In addition, Alley teaches "wherein said at least one parameter comprises a number of words of said voice data stream corresponding to a range of values" (Fig. 2, histogram is created based on the data received [i.e., the words received]).

Regarding **claim 9**, Alley teaches everything claimed, as applied above (see claim 1). In addition, Alley teaches "wherein said at least one parameter comprises a number of words of said voice data stream having μ-law linear equivalents corresponding to a range of values" (Fig. 2, probability distribution will correspond to the type of coding; also see p. 1156, col. 1, ¶1; and p. 1157, col. 2, ¶5).

Regarding **claim 14**, Alley teaches everything claimed, as applied above (see claim 1). In addition, Alley teaches "wherein said at least one parameter comprises a number of words of said voice data stream having A-law linear equivalents corresponding to a range of values." (Fig. 2, probability distribution will correspond to the type of coding; also see p. 1156, col. 1, ¶1; and p. 1157, col. 2, ¶5).

Regarding **claim 26**, Alley teaches everything claimed, as applied above (see claim 1). In addition, Alley teaches "performing one or more tests, each comprising one or more conditions using said at least one parameter" (Fig. 1, the classifier performs tests on the parameters produced).

Regarding **Claim 52**, Alley teaches a way to identify coding schemes. Alley's teachings include the following:

- a processor (Fig. 1, a preprocessor);
- a storage device (processor will inherently have memory);

- a set of computer instructions residing in said storage device, said set of computer instructions, when executed by said processor, identifying a type of encoding used in generating said voice data stream, said identifying based on generating a histogram using one of more words of said voice data stream (abstract, title voice telephony; Fig. 1, "excitation source" where one or more words are processed and result in the generation of a histogram [Fig. 2] which is used for identification).

Regarding **claim 53**, Alley teaches everything claimed, as applied above (see claim 52). In addition, Alley teaches "wherein said storage device comprises one of a hard drive, or other memory external to the processor, or memory internal to the Processor" (Fig. 1, indicates a processor which will inherently have associated RAM or internal registers capable of performing a memory function).

Regarding **claim 54**, Alley teaches everything claimed, as applied above (see claim 52). In addition, Alley teaches "a network interface for receiving a voice data stream" (p. 1156, Introduction, indicates that the application will be used in a telecommunications network which implies an inherent interface to communications).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alley in view of Zhang et al. (US Patent 7,173,963), hereinafter referred to as Zhang.

Regarding **claim 2**, Alley teaches everything claimed, as applied above (see claim 1). Alley teaches the recognition of A-law, μ-law (p. 1156, Introduction; and other coding schemes, p. 1157, col. 2, ¶(iii)), but Alley does not specifically teach "wherein said type of encoding comprises linear G.711, μ-law G.711, and A-law G.711". However, the examiner contends that this concept was well known in the art, as taught by Zhang.

In the same field of endeavor, teaches a method for identifying the encoding type of a codec. Zhang's teachings include the various forms of G.711 including PCM [linear], A-law, μ-law (Background, col. 1, line 20 through col. 2, line 12).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alley by specifically providing the support for the standards, as taught by Zhang, because it is well known in the art at the time of to be advantageous to support communications standards.

4. Claim 3, 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alley in view of Kim (US 2004/0214551), hereinafter referred to as Kim.

Regarding **claim 3**, Alley teaches everything claimed, as applied above (see claim 1). But Alley does not specifically teach "wherein said voice data stream is stored in a voice data stream file". However, the examiner contends that this concept was well known in the art, as taught by Kim

In the same field of endeavor, Kim discloses a system for transmitting and receiving multimedia data over a network (title, Abstract). In addition, Kim teaches that the data is read from a library server having a plurality of digital information files (¶'s 6, 24), and coupled to a receiving device over a network where the contents received can be stored in non-volatile memory [a voice data stream file] (Fig. 3A, items s300, s400).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alley by specifically providing the features, as taught by Kim, because it is well known in the art at the time of invention for the purpose of supporting a multimedia communication environment (¶8).

Regarding **claim 55**, Alley teaches everything claimed, as applied above (see claim 53). But Alley does not specifically teach "a media reader capable of reading a media containing a voice data stream file and capable of transmitting a voice data stream of said voice data stream file to said storage device. However, the examiner contends that this concept was well known in the art, as taught by Kim

In the same field of endeavor, Kim discloses a system for transmitting and receiving multimedia data over a network (title, Abstract). In addition, Kim teaches that the data is read from a library server having a plurality of digital information files (¶'s 6,

24), and coupled to a receiving device over a network where the contents received can be stored in non-volatile memory (Fig. 3A, items s300, s400).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alley by specifically providing the features, as taught by Kim, because it is well known in the art at the time of invention for the purpose of supporting a multimedia communication environment (¶8).

5. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alley in view of Shaffer et al. (US 6,324,409), hereinafter referred to as Shaffer.

Regarding **claim 56**, Alley teaches everything claimed, as applied above (see claim 52). But Alley does not specifically teach "a user interface for executing said set of computer instructions." However, the examiner contends that this concept was well known in the art, as taught by Shaffer.

In the same field of endeavor, Shaffer discloses a system and method for optimizing telecommunication quality. Shaffer also teaches the use of a general purpose computer system for control. Shaffer's computer system includes input and output and and a display device (Fig. 1, col. 3, line 63 through col. 4, line 11).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alley by specifically providing the features, as taught by Shaffer, because it is well known in the art at the time of invention for the purpose of providing an interface to control the system (col. 4, lines 7-10).

Response to Arguments

6. Applicant's arguments with respect to claims 1-4, 9, 14, 26, 52-56 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

7. Claims 37-46, and 48-51, and 66-88 are allowed.

It is noted that the closest prior art of record, Zhang does not teach the following specific combination of features (as given in claim 37) "reading one or more words of said voice data stream; determining a first number of words of said voice data stream that corresponds to a first range of values; determining a second number of words of said voice data stream that corresponds to a second range of values; generating m-law linear equivalents of said one or more words of said voice data stream; determining a third number of words corresponding to said m-law linear equivalents of said one or more words that have values within a third range; determining a fourth number of words corresponding to said m-law linear equivalents of said one or more words that have values within a fourth range; generating A-law linear equivalents of said one or more words of said voice data stream; determining a fifth number of words corresponding to said A-law linear equivalents of said one or more words that have values within a fifth range; and determining a sixth number of words corresponding to said A-law linear equivalents of said one or more words that have values within a sixth range.

Regarding independent claims 66-88, these claims include subject mater that was previously indicated as being allowable.

Claims 5-8, 10-13, 15-25, 27-36 and 57-65 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. It is noted that the closest prior art of record, Zhang does not teach the specific features (or combination of features) given in these dependent claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Paul Harper whose telephone number is (571) 272-7605. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

7/20/2007

VPH

V. PAUL HARPER
PRIMARY PATENT EXAMINER

PRIMARY PATENT EXAMINER